

A B S T R A C T

The invention relates to a method of interactively
5 simulating contact between objects. The inventive method
comprises the following steps, namely: the parameters
describing the physical characteristics of each of the objects
are computed; at the beginning of each simulated model
sampling time step, each object is subjected to a real-time
10 analysis of the specific behavior thereof according to a free
movement that does not take account of possible subsequent
contacts, and, subsequently, at an overall scene level, pairs
of detected intersecting objects are subjected to real-time
analysis; a list of collision groups is established; for each
15 collision group, parameters representing the physical
characteristics of the objects and the description of the
collisions are repatriated in real time, to characterize the
contact between two objects in the case of a pure relative
sliding movement; and, for each object, the specific behavior
20 of the object following the collision is displayed in real
time and the set of real-time processes is performed with a
calculation time step shorter than the sampling time step.